

ABSTRACT

The invention includes a process for making olefins. In one embodiment, the process comprises producing steam from a process water comprising organic compounds, wherein the process water comprises at least a portion of a product water from a hydrocarbon synthesis process; feeding the steam comprising some organic compounds and a light hydrocarbons feedstream into a steam cracker under cracking promoting conditions so as to crack with said steam some of the light hydrocarbons and some of the organic compounds from the steam to produce a cracker effluent comprising at least one olefin. In some embodiments, the light hydrocarbons feedstream comprises a naphtha cut. In alternate embodiments, the light hydrocarbons feedstream comprises a hydrocarbon fraction derived from a hydrocarbon synthesis reactor. In preferred embodiments, the process water and light hydrocarbons feedstream are at least in part derived from a Fisher-Tropsch synthesis, and the organic compounds comprise oxygenates.